

HAIR IRON

BACKGROUND OF THE INVENTION

The present invention relates to a hair iron for blocking the transfer of the
5 heat generated from the heating plate to the body portion, and more particularly, to
a hair iron which is capable of minimizing direct transfer of the heat generated from
the heating plate to the body portion, thereby does not cause a burn and can be more
safely utilized.

A conventional hair iron, as shown in Fig. 1, has bodies 1 being coupled by a
10 hinge and being spread to a given angle by means of a spring, and heating plates 2
correspondingly formed at the inner surface of the bodies 1. Also, the heating plates
2 are positioned at the inner surface of the bodies 1 in a collapsed state. The heating
plates 2, the bodies 1 and connection members are coupled in a line contact, without
forming any space. Circuits for converting a power being supplied to another
15 energy and transmitting the energy to other portion, are built in the bodies 1. The
hair iron also has a hinge portion 5 for coupling bodies 1, and a power supply cord
4.

The hair iron is used to treat user's hair in various styles, by using the
raised temperature of the heating plates 2.

20 However, at this time, since the user uses the hair iron being heated to high
temperature by manual, the heat generated from the heating plate is directly
transferred to the body portion, and thereby it may cause user's burn.

SUMMARY OF THE INVENTION

Therefore, in considering said problems in the art, the object of the present invention is devised to provide a hair iron which is capable of minimizing direct transfer of the heat generated from the heating plate to the body portion, thereby 5 does not cause a burn and can be more safely utilized.

The object of the present invention was achieved by providing a hair iron having a pair of heating portions, each heating portion correspondingly formed at the inner surface of a pair of body portions and while the respective heating 10 portions are in contact, hair to be held therebetween is cared, each heating portion comprises:

a heating plate to which a current is applied and temperature is maintained uniformly;
a connection member with which the heating plate is engaged and having 15 adiabatic functions; and

a body in which the connection member is engaged correspondingly each other therewithin,

wherein the heating plate, the connection member and the body are assembled, such that they are engaged in three-steps and the heating plate are 20 completely projected to the outside of the body.

Preferably, the heating portion is constructed such that a minute space is formed

among the heating plate, the connection member and the body, and thereby the transfer of the heat generated from the heating plate to the body can be minimized.

Preferably, the heating portion is also constructed such that an engagement portion of the heating plate, the connection member and the body is contacted in a spot by a protrusion, and thereby the transfer of the heat generated from the heating plate to the connection member can be minimized.

5 Preferably, the connection member is formed with a protrusion to be engaged with engagement portions of the heating plate and the body, and when being engaged, the heating plate, the connection member and the body are formed with a gap and are contacted in a spot.

10 Preferably, a spacing member is disposed between the connection member and the body and is made of cushion materials.

BRIEF DESCRIPTION OF THE DRAWINGS

15 The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

Fig. 1 is a perspective view showing a conventional hair iron;

Fig.2 is a disassembled perspective view showing the hair iron according to the present invention;

20 Fig. 3 is a perspective view showing a connection member of the hair iron

according to the present invention; and

Fig. 4 is an illustrative view showing use of the hair iron according to the present invention.

5

DESCRIPTION OF THE PREFERRED EMBODIMENT OF THE INVENTION

Below, the example provides a more detailed description of a preferred embodiment of the present invention.

Fig.2 is a disassembled perspective view showing the hair iron according to the present invention; Fig. 3 is a perspective view showing a connection member of 10 the hair iron according to the present invention; and Fig. 4 is an illustrative view showing use of the hair iron according to the present invention. The reference numeral 50 denotes heating portions.

Each heating portion 50 has a heating plate 20 to which a current is applied and temperature is maintained uniformly, a connection member 30 with which the 15 heating plate 20 is engaged and having adiabatic functions, and a body 40 in which the connection member 30 is engaged correspondingly each other therewithin.

When the heating plate 20, the connection member 30 and the body 40 are assembled, they are engaged in three-steps so that the heating plate 20 is completely projected to the outside of the body 40.

20 Also, the heating portion 50 is constructed, such that a minute space is formed among the heating plate 20, the connection member 30 and the body 40, and

thereby the transfer of the heat generated from the heating plate 20 to the body 40 can be minimized.

The connection member 30, as shown in Fig. 3, is formed with at least 2 or more protrusions 31 which are engaged with engagement rails 21 of the heating plate 20.

The engagement rails 21 are formed of "L"-shaped grooves and are contacted in a spot to the connection member 30, with semi-elliptical protrusions 31 sliding.

Also, the connection member 30 is formed with at least 2 or more gap protrusions 33 at its outer surface with which the body 20 is engaged.

The gap protrusions 33 cause the connection member 30 to be spaced from the body 10 at a predetermined interval. Also, the gap protrusions 33 are formed with minutely being protruded.

Spacing members 11 are formed between the body 10 and the connection member 30 being engaged with the heating plate 20 and are made of cushion materials.

The spacing members 11 are disposed to the inner surface of the body 10 at a predetermined height, and the connection member 30 is placed at the upper surface of the spacing members 11. This prevents the connection member 30 from being directly contacted with the body 10.

As mentioned in the above, the heating plate 20 being engaged with the connection member 30, is engaged with the body portion 10.

Below, the operation of the hair iron of the present invention is described.

As shown in Fig. 4, a power source cord being connected to a body 10, is 5 connected to an external power supply unit and a power switch on the body 10 is turned on by user, a power is supplied to the hair iron.

When the hair iron is set to a predetermined temperature using the temperature control portion and a power is supplied to the circuit, energy is transferred to a heating plate 20 and the heat is generated at the heating plate 20.

10 At this time, the heating plate 20 is typically heated to the temperature more than 150 °C. However, since the heating plate 20 is engaged with the connection member 30, direct transfer of the heat being generated to the surface of the body 10 is minimized.

15 In the above manner, since the spacing members 11 are disposed to the inner surface of the body 10 at a predetermined height, the connection member 30 is spaced from the body 10, without being directly contacted with the body 10, and thus the direct transfer of the heat to the surface of the body 10 can be minimized.

Also, the connection member 30 is formed with at least 2 or more gap protrusions 33 at its outer surface with which the body 20 is engaged.

20 The gap protrusions 33 cause the connection member 30 to be spaced from the body 10 at a predetermined interval. Also, the gap protrusions 33 are formed

with minutely being protruded.

According to the hair iron structure of the present invention, since direct transfer of the heat generated from the heating plate of the hair iron to the body portion can be minimized, the hair iron does not cause a burn and can be more safely utilized.

The above examples are offered to illustrate this invention and are not meant to be construed in any way as limiting the scope of this invention. An expert in the art can sufficiently understand desirable examples of the present invention. Also, the range of the present invention must be decided by the following claims based on technical concept of the present invention.

Although the preferred embodiments of the invention have been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.